

What is claimed is:

1. An expanded-graphite sheet with a thermal conductivity of 350 W/(m·K) or more in a direction parallel to the surface.

5

2. The expanded-graphite sheet of claim 1 with an arithmetic mean surface roughness of less than 5 μ m.

10 3. The expanded-graphite sheet of claim 1 wherein the difference between the highest and lowest values of local thermal conductivities at various spots on the expanded-graphite sheet is 10% or less of the overall mean thermal conductivity thereof.

15 4. The expanded-graphite sheet of claim 2 wherein the difference between the highest and lowest values of local thermal conductivities at various spots on the expanded-graphite sheet is 10% or less of the overall mean thermal conductivity thereof.

5. The expanded-graphite sheet of claim 1 having an electromagnetic-wave-shielding effect of 60dB μ V/m or more in the frequency range of 100-800 MHz.

20 6. The expanded-graphite sheet of claim 2 having an electromagnetic-wave-shielding effect of 60dB μ V/m or more in the frequency range of 100-800 MHz.

7. The expanded-graphite sheet of claim 3 having an electromagnetic-wave-shielding effect of 60dB μ V/m or more in the frequency range of 100-800 MHz.

25

8. The expanded-graphite sheet of claim 4 having an electromagnetic-wave-shielding effect of 60dB μ V/m or more in the frequency range of 100-800 MHz.

30 9. The expanded-graphite sheet of claim 1 with a total impurity content of 10 ppm or less.

10. The expanded-graphite sheet of claim 2 with a total impurity content of 10 ppm or less.
11. The expanded-graphite sheet of claim 3 with a total impurity content of 10
5 ppm or less.
12. The expanded-graphite sheet of claim 4 with a total impurity content of 10 ppm or less.
- 10 13. The expanded-graphite sheet of claim 1 with a bulk density of 1.6 Mg/m³ or more.
14. The expanded-graphite sheet of claim 2 with a bulk density of 1.6 Mg/m³ or more.
- 15 15. The expanded-graphite sheet of claim 3 with a bulk density of 1.6 Mg/m³ or more.
16. The expanded-graphite sheet of claim 4 with a bulk density of 1.6 Mg/m³
20 or more.